Mount Taylor Coal Field

Location

This coal field is located on the south and east side of the Mount Taylor volcanic complex in McKinley, Sandoval, and Cibola Counties, New Mexico. The original usage of the name Mount Taylor by Hunt (1936) also encompasses several other fields (see San Mateo and Rio Puerco fields). Much of the coal in the field is overlain by lava flows associated with Mount Taylor.

Stratigraphy

The first detailed mapping of the geology was completed by Hunt (1936) And the latest compilation of the geology and coal resources is by Dillinger (1989, 1990). Thicknesses of the units are from a compilation by Dillinger (1990).

Table. Stratigraphy—Mount Taylor coal field.

Stratigraphic units	Depositional environment	Thickness (ft)
Crevasse Canyon Formation		
Gibson Coal Member	coastal plain; minor coal	64-492
Dalton Sandstone Member	nearshore marine	40-213
Mancos Shale		
Mulatto Tongue	marine shale	60-400
Crevasse Canyon Formation		
Dilco Coal Member	coastal plain; minor coal	80-200

Coal Deposits

Coals are present in the Gibson Coal and Dilco Coal Members of the Crevasse Canyon Formation in the southern Mount Taylor field and only in the Gibson in the eastern part of the Mount Taylor field. The beds are between 2.5 and 7.0 ft thick and are lenticular in nature (Kottlowski and Parkhill, 1971; Hoffman, 1996). Discontinuous coal beds in the eastern part of the Mount Taylor field are as thick as 6.5 ft (Kottlowski and others, 1971).

Coal Quality

The coal is subbituminous A to high-volatile C bituminous (Kottlowski and Parkhill, 1971; Hoffman, 1996). The Gibson and Dilco coals have a sulfur content of about 0.6 percent and an ash content of about 6 percent based on only a few analyses (Hoffman, 1996).

Resources

In the southern Mount Taylor field, the Gibson contains about 14 million short tons of coal under less than 200 ft of overburden (Hoffman, 1996); the member contains about 37 million short tons under less than 1,000 ft of overburden and in beds greater than 3.5 ft thick (Dillinger, 1989). The Dilco contains no resources in beds greater than 3.5 ft thick (Dillinger, 1989). No strippable coal is reported from the eastern Mount Taylor field (Kottlowski and others, 1971).

Production History

The East Mount Taylor coal field had four mines or prospects in operation between 1924 and 1954, and the area showed some potential in the 1960's; however, exploration drilling showed insufficient coal to allow further development (Nickelson, 1988).

References

Dillinger, J.K., 1989, Coal resources maps of the Grants 30'x60' quadrangle, west-central New Mexico: U.S. Geological Survey Coal Investigations Map C118-B, scale 1:100,000.

Dillinger, J.K., 1990, Geologic map of the Grants 30'x60' quadrangle, west-central New Mexico: U.S. Geological Survey Coal Investigations Map C118-A, scale 1:100,000.

Hoffman, G.K., 1996, Coal resources of New Mexico: New Mexico bureau of Mines and Mineral Resources Resource Map 20, 22 p., 1 plate, scale 1:1,000,000.

Hunt, C.B., 1936, The Mount Taylor coal field, *in* Sears, J.D., Hunt, C.B., and Dane, C.H., eds., Geology and Fuel Resources of the Southern Part of the San Juan Basin: U.S. Geological Survey Bulletin 860-B, p. 31–80.

Kottlowski, F.E., and Parkhill, T.A., 1971, South Mount Taylor Crevasse Canyon area, *in* Shomaker, J.W., Beaumont, E.C., and Kottlowski, F.E., eds., Strippable Low-Sulfur Coal Resources of the San Juan Basin in New Mexico and Colorado: New Mexico Bureau of Mines and Mineral Resources Memoir 25, p. 87–89.

Kottlowski, F.E., Beaumont, E.C., and Parkhill, T.A., 1971, East Mount Taylor Crevasse Canyon area, *in* Shomaker, J.W., Beaumont, E.C., and Kottlowski, F.E., eds., Strippable Low-Sulfur Coal Resources of the San Juan Basin in New Mexico and Colorado: New Mexico Bureau of Mines and Mineral Resources Memoir 25, p. 89–92.

Nickelson, H.B., 1988, One hundred years of coal mining in the San Juan Basin, New Mexico: New Mexico Bureau of Mines and Mineral Resources Bulletin 111, 226 p.